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NOTICE OF ALLOWANCE AND FEE(S) DUE

32423 7590 07/23/2009

SPRINT COMMUNICATIONS COMPANY L.P.
6391 SPRINT PARKWAY
KSOPHT0101-Z2100
OVERLAND PARK, KS 66251-2100

EXAMINER

SAMUEL, DEWANDA A

ART UNIT

PAPER NUMBER

2416

DATE MAILED: 07/23/2009

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/689,690

10/22/2003

Dararith Un

2486/SPRI 107676

4897

TITLE OF INVENTION: SYSTEM AND METHOD FOR SELECTIVE ENHANCED DATA CONNECTIONS IN AN ASYMMETRICALLY ROUTED NETWORK

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$0	\$0	\$1510	10/23/2009

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
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INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

32423 7590 07/23/2009

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I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/689,690 10/22/2003 Dararith Un 2486/SPRI 107676 4897

TITLE OF INVENTION: SYSTEM AND METHOD FOR SELECTIVE ENHANCED DATA CONNECTIONS IN AN ASYMMETRICALLY ROUTED NETWORK

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional NO \$1510 \$0 \$0 \$1510 10/23/2009

EXAMINER	ART UNIT	CLASS-SUBCLASS
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SAMUEL, DEWANDA A 2416 370-409000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
- 3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/689,690	10/22/2003	Dararith Un	2486/SPRI 107676	4897
32423	7590	07/23/2009	EXAMINER	
SPRINT COMMUNICATIONS COMPANY L.P. 6391 SPRINT PARKWAY KSOPHT0101-Z2100 OVERLAND PARK, KS 66251-2100			SAMUEL, DEWANDA A	
			ART UNIT	PAPER NUMBER
			2416	
DATE MAILED: 07/23/2009				

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 847 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 847 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.

10/689,690

Applicant(s)

UN ET AL.

Examiner

Art Unit

DEWANDA SAMUEL

2416

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 24 April 2009.
2. ☒ The allowed claim(s) is/are 1-55.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- * Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date ____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date ____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date ____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other ____. |

DETAILED ACTION

1. This communication is responsive to the communication filed on 04/24/2009.

Claims 1-55 are pending.

Examiner's Amendment

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Camacho on 07/13/2009.

The application has been amended as follows:

Claims

Claim 17 is amended and replaced with the following:

Claim 17. (Currently Amended) ~~One or more computer storage media having computer executable instructions embodied thereon for performing a method of enhancing a data connection from a source to a destination network, A method for generating an enhanced data connection,~~ the method comprising:

Art Unit: 2416

receiving at an at least one remote access server data associated with a modem-based data session established via at least one circuit-switched network communicating with at least one data network that facilitates asymmetric data routing; encapsulating at the at least one remote access server packets of the data to be sent in a tunneling protocol for delivery via one or more virtual point-to-point connections; communicating the tunneling-protocol-encapsulated data packets via at least one virtual point-to-point connection over at least one communications path traversing the at least one data network and operable to convey data-types that utilize a point-to-point connection, wherein the at least one communications path couples the at least one remote access server to at least one enhancement cluster based on a destination address associated with the tunneling-protocol-encapsulated data packets, and wherein the virtual point-to-point connection emulates a dedicated point-to-point connection path connecting the at least one remote access server to the at least one enhancement cluster; and receiving and processing the tunneling-protocol-encapsulated data packets in the at least one enhancement cluster to enhance the data connection.

Art Unit: 2416

Claim 18 line 1 –media—is replaced with the word –method--

Claim 19 line 1 –media—is replaced with the word –method--

Claim 20 line 1 –media—is replaced with the word –method--

Claim 21 line 1 –media—is replaced with the word –method--

Claim 22 line 1 –media—is replaced with the word –method--

Claim 23 line 1 –media—is replaced with the word –method--

Claim 24 line 1 –media—is replaced with the word –method--

Claim 25 line 1 –media—is replaced with the word –method--

Claim 26 line 1 –media—is replaced with the word –method--

Claim 27 line 1 –media—is replaced with the word –method--

Claim 28 line 1 –media—is replaced with the word –method--

Claim 29 line 1 –media—is replaced with the word –method--

Claim 30 line 1 –media—is replaced with the word –method--

Claim 31 line 1 –media—is replaced with the word –method--

Claim 32 line 1 –media—is replaced with the word –method--

Claim 33 line 1 –media—is replaced with the word –method--

Claim 49 is amended and replaced with the following:

Claim 49. (Currently Amended) ~~One or more computer storage media having computer-executable instructions embodied thereon for performing a method of enhancing a data connection from a source to a destination network, A method for generating an enhanced data connection,~~ the method comprising: receiving at an at

Art Unit: 2416

least one remote access server data packets that form a part of a modem-based data session; encapsulating at the at least one remote access server the data packets to be sent in a tunneling protocol for delivery via one or more virtual point-to-point connections;

communicating the tunneling-protocol-encapsulated data packets via at least one virtual point-to-point connection over at least one communications path traversing an asymmetric data network and operable to convey data-types that utilize a point-to-point connection, wherein the at least one communications path couples the at least one remote access server to at least one enhancement cluster based on a destination address associated with the tunneling-protocol-encapsulated data packets, and wherein the virtual point-to-point connection emulates a dedicated point-to-point connection path connecting the at least one remote access server to the at least one enhancement cluster; and receiving and processing the tunneling-protocol-encapsulated data packets in the at least one enhancement cluster to enhance the data connection.

Art Unit: 2416

Claim 50 line 1 –media—is replaced with the word –method--

Claim 51 line 1 –media—is replaced with the word –method--

Claim 52 line 1 –media—is replaced with the word –method--

Claim 53 line 1 –media—is replaced with the word –method--

Claim 54 line 1 –media—is replaced with the word –method--

Claim 55 line 1 –media—is replaced with the word –method--

Allowable Subject Matter

3. The following is a statement of reasons for the indication of allowable subject matter: a destination network; Baldwin et al. (PG PUB 2003/10149746) discloses having an ensobox: an Internet service provider appliance that enable an operator thereof to offer a full range of Internet services. Baldwin et al. also discloses the subscribers dial into the access node over the public telephone network using a modem and standard dial-up networking software on their computer and when a subscriber dials the ensobox telephone number, the call is routed to one of the modem ports on the Remote Access Server. Baldwin further discloses that the ensobox provides dial-up access to the Internet and that the core node within the ensobox is the "middle man" between the Internet and the Public Switched Telephone Network. Baldwin further discloses PPP(point to point) sessions transmitting over serial lines. In addition, Baldwin discloses the ensobox processing data within PPP session from a PSTN to the Internet. Baldwin discloses having a PPP session within a network that comprise of a

Art Unit: 2416

PSTN and the Internet . Araujo et al. (US Patent 6,118,785) discloses having a point-to-point protocol with a signaling channel and also having a enhanced PPP whereby transmitting data within a VC virtual circuit to ISP Remote Access Server and encapsulation for PP data packets sent between two L2TP endpoints. However, the prior art fails to anticipate or render obvious the following recited specific features in claim 1 and similar claims 17,33, 41 and 49: “an input interface that receives data associated with a modem-based data session established via at least one circuit-switched network communicating with at least one asymmetric-routing data network that is capable of facilitating a transfer over the at least one asymmetric-routing network of data packets that are encapsulated in a tunneling-protocol and that are associated with the modem- based data session and operable to send using the tunneling protocol for delivery via one or more virtual point-to-point connections based on a destination address associated with the tunneling-protocol-encapsulated data packets; at least one enhancement cluster for receiving and processing the tunneling-protocol-encapsulated data packets that enhances a connection from a source to a destination network; and at least one virtual point-to-point connection for communicating the tunneling-protocol-encapsulated data packets over at least one communications path traversing the at least one asymmetric-routing data network and operable to convey data-types that utilize a point-to-point connection, wherein the at least one communications path couples the input interface to the at least one enhancement cluster based on the destination address, and wherein the at least one virtual point-

Art Unit: 2416

to-point connection emulates a dedicated point-to-point connection path connecting the input interface to the at least one enhancement cluster.”

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Prior Art

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Verma et al. (US Patent 6,614,809)

Valencia (US Patent 6,487,598)

Bommareddy et al. (US Patent 6,772,226)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEWANDA SAMUEL whose telephone number is

Art Unit: 2416

(571)270-1213. The examiner can normally be reached on Monday- Thursday 8:30-5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Q. Ngo can be reached on (571) 272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art
Unit 2416

/DeWanda Samuel/
Examiner, Art Unit 2416
7/23/2009